

# BRIEFING

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### Federal Crop and Crop Revenue Insurance Programs: Group Risk Plan (GRP) Contracts

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Objective Analysis for Informed Decision Making

Federal crop insurance against individual

farm yield losses in the form of multiple peril contracts has been available for some crops since 1938. Following the 1980 Federal Crop Insurance Act, the number of crops and the geographic coverage of the federal crop yield loss insurance program was greatly expanded. Beginning in the late 1980s, in addition to traditional multiple peril contracts, new policies were developed based on yield losses at the county level and offered for a limited number of crops in a limited number of counties.

Following the 1994 Crop Insurance Reform Act, a wider range of federally subsidized insurance contracts were introduced that provided protection against revenue losses and catastrophic losses.

Today, producers face a wide array of crop insurance alternatives including yield based Actual Production History (APH) insurance contracts and Revenue Insurance contracts. Not all insurance contracts are available for every crop in any given county. In some counties, Risk Management Agency (RMA) approved insurance contracts are not available for some crops. In these circumstances, producers can either utilize the Noninsured Disaster Assistance Program (NAP) or make a request for actuarial change.

Yield based APH insurance contracts include Multiple Peril Crop Insurance (MPCI) and Group Risk Plan (GRP) contracts. Under MPCI contracts, indemnity payments are triggered by low yields on an individual producer's insured acres. Under GRP contracts, indemnity payments are triggered by low county-wide yields.

Revenue insurance contracts that provide indemnities for revenue losses caused by either low yields, low prices, or both include Group Revenue Insurance Policy (GRIP) contracts, Crop Revenue Coverage Contracts (CRC), Revenue Assurance (RA) contracts, and Income Protection (IP) contracts. Under CRC, RA, and IP revenue insurance contracts, indemnities are triggered by low revenues for an individual producer (caused either by low yields, or low prices, or both). Under GRIP contracts, indemnity payments are triggered by low average revenue for the crop in the country.

This Briefing describes and discusses the GRP program in which indemnities are triggered by average yield losses in the county rather than on the producer's insurable units.

#### Group Risk Plan (GRP) Contracts

Producers of several major crops such as wheat and cotton have been able to utilize federal GRP contracts to insure against yield loss since the late 1980s. In fact, GRP contracts were the second type of federally subsidized insurance programs to be made available to producers.

#### **Insurable Areas:**

A producer can only purchase a GRP contract for all acres of a crop produced in a given county (that is, the producer's enterprise unit).

#### FCIC Expected County Yield

The Federal Crop Insurance Corporation (FCIC) expected county yield for the crop year is estimated using historical data. The estimation procedures generally take into account long term trends in yields, the effects of weather events, and other factors affecting production.

#### **Yield Elections**

The producer selects the proportion of the FCIC expected county yield against which indemnity payments will be triggered

from one of five county yield election levels (70, 75, 80, 85, and 90 percent).

#### **Trigger Yields**

The GRP contract trigger yield is the expected county average yield multiplied by the producer's yield election. If the actual county yield falls below the trigger county yield then the producer receives an indemnity payment.

#### **Dollar Amount of Protection**

For each GRP crop, the producer selects a dollar amount of protection per acre for the crop based on the FCIC published maximum dollar amount of protection for the crop that can be purchased on a per acre basis. The producer can select between 60 percent and 100 percent of the maximum per acre dollar amount of protection.

#### **Indemnity Payments**

Producers receive indemnities when the actual county yield is less than the trigger yield, sometimes called the coverage level, elected by the producer. Assuming that the producer has a 100 percent ownership share in the crop, the indemnity payment for each insured acre is calculated as follows.

First, a payment calculation factor is computed for each producer when the producer's trigger yield exceeds the actual country yield. The payment calculation factor is defined as follows:

Payment calculation factor = (Trigger Yield - Actual County Yield)/Trigger Yield

This payment calculation factor is multiplied by the producer's dollar amount of protection to compute the producer's per acre indemnity payment.

#### Example:

Suppose the producer has a 100 percent share in 200 acres of a crop in a county in which the expected county yield for the corn crop is 100 bushels per acre. The FCIC maximum dollar amount of protection for the crop is \$250 per acre.

The producer selects a GRP contract with a 90 percent yield election and a \$200 per acre level of protection (80% of the maximum amount of dollar protection). The actual county yield is 60 bushels per acre.

1. The producer's trigger yield:

Trigger Yield = Yield election x County expected yield = 90 percent x 100 bushels per acre = 90 bushels per acre.

2. The producer's payment calculation factor (given the actual county yield of 60 bushels per acre) is:

Payment calculation factor = (Trigger Yield -Actual County Yield)/ Trigger Yield = (90 -60)/90 = 0.333

3. The producer's per acre indemnity payment is:

Per Acre Indemnity = Payment Calculation Factor x Dollar Amount of Protection =  $0.333 \times $200 = $66.67$ 

The producer's total indemnity payment is the per acre indemnity payment multiplied by the number of insured acres or \$13,333.33 (\$66.67 per acre x 200 acres).

#### **Premium Rates and Premium Payments**

Premium rates are defined as specified percentages for each yield election. Different premium rates are charged for each yield election. As yield elections increase, premium rates also increase because the trigger yield increases and, therefore, the average size of indemnity payments increases. The producer's elected premium rate is applied to the dollar amount of protection the producer selects to calculate the producer's premium payment.

#### Example (continued):

In the producer's county, suppose that the premium rate for a 90 percent yield election or coverage is 7 percent. The producer's per acre premium payment is:

Per Acre Premium Payment = Premium Rate xDollar Amount of Protection = 7 percent x\$200 per acre = \$14 per acre

The producer's total premium for all insured acres under the 90 percent yield election and \$200 amount of protection GRP contract is \$2,800 (200 acres x \$14 per acre). Note that if the producer selects a larger amount of protection or a higher yield election, the premium payment increases.

The premium payment that the producer has to pay is actually lower than \$2,800 because the federal government provides a per acre subsidy. If the per acre subsidy for the producer's contract is \$5 per acre, the producer will receive a total subsidy of \$1,000 (\$5 per acre x 200 acres). The producer would be required to pay total premium of only \$1,800 for the contract, \$2,800 less \$1,000.

#### **Premium Subsidies**

The premium payments charged to producers for all federal crop yield and revenue insurance contracts are lower than the premium payments that would be charged if producer premium payments were required to cover all expected indemnity payments for crop and revenue losses. The federal government provides subsidies on all contracts. The dollar amounts of the premium subsidies generally do not increase in proportion to yield elections. Producers insuring against crop losses with lower yield elections receive subsidies that make up a larger share of their total premium payments than producers insuring against crop losses with higher yield elections.

#### Shares

Individuals may not have 100 percent ownership shares in the crop. Each individual with a share in the crop may insure their own share. Indemnity payments for losses and premium payments are pro-rated by the individual's share.

#### Prevented Planting and Replanting Indemnity Payments

In some years, producers may need to replant a crop or be prevented from planting a crop. In some circumstances producer may be indemnified for replanting costs under an MPCI contract. Unless limited by the provisions of the policy, indemnity payments will also be made when producers are prevented from planting during the planting dates prescribed in the contract because of causes covered by the insurance contract (such as severe weather or flooding).

#### **Catastrophic Risk Protection**

A producer may purchase a Catastrophic Risk Protection (CAT) GRP. Under this contract, in 2002 the producer can purchase a GRP contract with a 65 percent yield election and a dollar amount of protection equal to 55 percent of the maximum dollar amount of protection.

The producer must pay an administrative fee of \$100 for each crop in each county

which may be waved for limited resource farmers. However, producers are not required to pay any premiums for this coverage.

#### Sign Up Dates

FCIC identifies unique dates by which producers must sign up for their GRP contracts that are specific to each county for each crop.

## Crops Covered by MPCI and CAT Contracts

Crops covered by GRP in at least some

counties include canola, corn, grain sorghum, soybeans, upland cotton, rice, wheat, and barley, in addition to other crops.

## Reporting of Acreage and Crop Damage

Each crop year, producers with GRP contracts are required to submit an acreage report by unit for each insured crop.

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